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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,565	05/31/2001	Takeshi Yamane	010694	7576

23850 7590 03/08/2004

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EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/867,565	<b>Applicant(s)</b> YAMANE, TAKESHI	
	<b>Examiner</b> Katarzyna Wyrozebski Lee	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

This office action is issued based on the understanding that the hardener is one of the raw materials that are all together incorporated into the composition.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over HARA (EP 0,959,262) in view of GARDZIELLA (US 4,918,116).

The prior art of HARA discloses composition for making friction brakes (see examples) comprising binder, fibers and fillers. Although the hardener is not mentioned its presence is implied in articles such as friction materials.

According to [0038] the components are uniformly mixed in dry state, then are heat pretreated and molded to make brake pad lining.

According to the same paragraph the composition is heat pre-treated before it is cured at a temperature range of 100-300°C. This also signifies that temperatures of 100°C do not cure the composition.

The difference between the prior art and the present invention is the mixing temperature range.

With respect to the above difference, the prior art of GARDZIELLA discloses composition for friction materials comprising binder, hardener, fiber and filler.

The temperatures at which the components are mixed are 80°C, 140°C and 100°C. The composition was cured in each case at the temperatures of 180°C, 170°C or 200°C (see examples).

From the prior art of GARDZIELLA it can be seen that hexamine does not cure the composition until temperature of at least 170°C is reached.

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Polymeric component of the friction material, that is phenolic resin or novolak resin is solid at room temperature and begins to soften at 25°C (col. 3, lines 62-65). Fillers can be mixed in at temperatures as low as 60°C (col. 4, lines 1-2) together with curing agents.

In the light of the above disclosure, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to mix the components of the friction composition at a temperature of 100°C – 120°C and thereby obtain the claimed invention. Mixing the components at this temperature as it is evidenced in GARDZIELLA would not cause premature curing, since in order to cure the composition the temperature has to be elevated to 1270°C.

The applicant's arguments of the prior art of GARDZIELLA as it was applied against present claims in the last office action are considered moot since 102 rejection is overcome

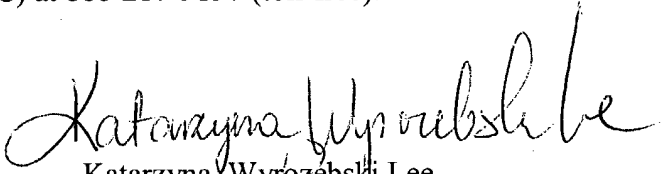
The examiner would like to address one issue though. The applicants have stated that the prior art of GARDZIELLA does not teach the temperatures of 100°C. The examiner disagrees. Final office action on the merits specifically points the applicants to the example reciting 100°C. The reason why the prior art of GARDZIELLA is no longer utilized as a 102 rejection is that the process of GARDZIELLA is wet process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Katarzyna Wyrózebski Lee  
Primary Examiner  
Art Unit 1714

kiwl  
February 24, 2005